Heritage Resources – Considerations for Trail Planning

Off trail activities and construction of unplanned trails can have adverse effects on cultural resources. Effects can include direct damage, increased looting and impacts to Tribal values. Cultural resources need to be considered as part of the trail planning and design process.

Effects of Unauthorized Trail Construction –
Unauthorized trail construction rarely takes into account the presence of cultural resources. User created trails often cut directly through the middle of sites, crushing surface artifacts, disturbing stone features, and otherwise disturbing cultural deposits. Rocks from prehistoric walls are sometimes moved to clear trails that cut through structures or are "mined" from nearby sites to build trail features. Collapsed pueblo walls have been used as the base of mountain bike jumps or play features. Archaeological sites are typically located on flatter areas, which trail builders often take advantage of. The more incised nature of mountain bike and horse trails tends to capture water. These trails may experience increased erosion, further impacting sites that they happen to cut through. This is exacerbated by the highly erosive soils around Sedona.

Potential for Increased Looting –
Trails also convey recreationists to parts of the backcountry that would otherwise be lightly visited. This increases the likelihood that the surface artifacts (which is all that archaeologists ever get to analyze on most sites) are vacuumed up by casual collecting. Decorated sherds, which typically provide the most information about when sites were occupied and what activities took place at the site, are the first ones to be noticed and taken. Over time, even moderate numbers of visitors can remove all the diagnostic artifacts from a site before archeologists know the site exists.

There is also a relationship between the level of site visitation and intensive looting. Sites that are visited regularly throughout the day have lower incidence of looting, particularly if they are developed with public interpretation. At the other end of the spectrum, sites that are unknown to the public are somewhat protected by their anonymity. However, backcountry sites that are known by the public and reasonably accessible by trail but are somewhat remote are the most likely to be looted.

Tribal Cultural Values –
Finally, unplanned trails can have adverse effects on areas of traditional cultural significance, such as shrines, traditional plant gathering areas, and other ceremonial locations. These places are valued for their setting, not necessarily for physical archaeological remains. Critical parts of the setting can be degraded by the increased presence of visitors and the visual impact of the trails themselves. Several tribes ascribe spiritual significance to local sandstone features, including Bell Rock, Courthouse Butte, Cathedral Butte, and the red cliffs west of Sedona. Populations of rare traditional plants used for ceremonies and medicine could be directly damaged by trails.

High Site Density in Red Rock Country –

Since user-created trails are laid out without consideration of cultural (or natural) resources, the likelihood of those resources being affected by trails is directly related to the density of sites on the landscape. The Coconino Forest predictive site density model indicates that the entire greater Sedona area is within zones of either Very High or Extremely High predicted site density (class 4 or 5 on a scale of 1-5). The entire area being proposed for closure to cross country mountain bike travel is within one of these two highest predicted site densities, with the minor exception of a small area along the rim at the head of Casner Canyon (approximately 300 acres within the Casner Canyon Research Natural Area).

Areas of Special Concern:

Within the Red Rock area, certain areas of particularly high site density or cultural resource value can be identified. The Map titled: "Areas of Resource Concern" includes these locations and they are described here.

The first are the prominences of Bell Rock, Courthouse Butte, Cathedral Butte and the viewsheds from those places. The tribes have not specifically asked that use be restricted or trails be eliminated in these areas, so no specific restrictions are based on these areas. However, conservative management of dispersed recreation in these areas is requested.

The area south and east of Courthouse Butte, which includes part of the viewshed mentioned above, is one high value area. Previous survey and a geomorphologic study of Big Park indicate that the VOC area east of SR179 likely had extensive prehistoric farming and large associated habitation sites. The entire valley apparently has deflated several inches to feet, and most of the prehistoric sites have been lost. It is important to preserve what archaeological record may remain on the high ground between the arroyos. Sites located there could help archaeologists and climatologists figure out what happened environmentally to cause such rapid deflation.

The Turkey Creek area south of Oak Creek and west of Cathedral Butte is a critical area to protect. The terrace and relatively flat bajada slopes that lie between Oak Creek and the red cliffs at the base of House Mountain have deep soils and are predicted to have a very high site density. This area is relatively unexplored archaeologically. The only areas that have been surveyed lie along Verde Valley School Road and Red Rock Crossing. However, the areas that have been surveyed confirm a very high site density. Further, anecdotal reports from volunteers substantiate the presence of many more archaeological sites in the area. The erosive soils in this area make trails easy to wear in by use and sites are more susceptible to erosion. This entire area should be protected until recreational development can be planned.

The area along the cliffs located north and west of Sedona is unusually sensitive for two reasons. First, one of the eroded sandstone layers left a band of chert nodules across the area. The prehistoric people living throughout the valley utilized this chert to make stone tools. Thus, lithic sites are numerous throughout the area. The chert outcrops can be very large, so some of the lithic scatters are hundreds of meters across. These large sites

take a concerted effort to properly route trails around. Several user created trails have been adopted recently that cut through large lithic scatters. Some segments of trail had to be rerouted along seemingly non-intuitive alignments in order to avoid the sites.

The area along Dry Creek and along the front of wilderness canyons, such as Boynton and Long, is known to have an extremely high site density. Dry Creek provided a source of water. Aside from the many lithic scatters mentioned above, there are many previously recorded roasting pit sites, small pueblos, and pit house villages in this area.

The Schnebly Road area does not have many known prehistoric sites, but there are numerous historic accounts of protohistoric Yavapai/Apache occupation of the area. Protohistoric sites are rarely found, so they are particularly valuable. Archaeologists don't know what might be left of this occupation, but this is another area that warrants proper planning for recreation trails.

The final area of high concern in the Sedona area is the RNA in Casner Canyon. Again, there are few known sites in the area. However, there is at least one Apache roasting pit that has been cut by a user created bike trail. The RNA should be preserved in a natural state for scientific study of all resources.